

### REMARKS

Claims 1-6 are pending in the application. The Examiner has rejected claim 1 under 35 U.S.C. §112 as being indefinite for failing to particularly point and distinctly claim the subject matter which applicant regards as the invention. The Examiner has rejected claims 1-3, 5 and 6 under 35 U.S.C. §103(a) as unpatentable over Zadro (U.S. 2004/0047052) in view of Hung et al. (U.S. Patent No. 5810306). The Examiner also has rejected claims 4 under 35 U.S.C. §103(a) as being unpatentable over Zadro in view of Hung et al. and Eames (U.S. Patent No. 314,440).

With respect to the rejection of claim 1 under 35 U.S.C. §112 as being indefinite for failing to particularly point and distinctly claim the subject matter, Claim 1 has been modified to traverse the Examiner's rejection.

Claim 1 cites:

1. A supporting structure, comprising:  
an elongate body member made of flexible material and being bendable and foldable into a plurality of shapes while retains the bent shape until subsequently reposition;  
an exterior covering member, directly formed on the elongate body member by an injection mold process, wherein the exterior covering member exposes two ends of the elongate member and has a bellow configuration, wherein the exterior covering member has a diameter gradually reduced from two ends to a center thereof;  
a suction device, connected to one of the exposed end of the elongate body member; and  
a holding device, connected to the other exposed end of the elongate body member.

(Emphasis added)

With respect to the rejection of claims 1-3, and 5-6 under 35 U.S.C. §103(a) as unpatentable over Zadro in view of Hung et al. The Examiner states “ [i]t would be obvious to one of ordinary skill in the art ... substituted Zadro's flexible member for Hung et al.'s flexible member (10) as both would perform equivalently in Zadro's invention.” Applicant disagrees. Hung et al.'s flexible arm uses a heavy gauge wire and “a plurality of spacer members 25, 25', are positioned along wire. Each space member preferably is in the form of a disk (See Fig.3 and Fig. 4), having a substantially circular cross-section.” (Hung et al. col. 3, ll. 19, 21.) “A cover

member 41, preferably in the form of an outwardly ribbed or corrugated substantially cylindrical tube or bellow structure ... is fitted over wire 13 and disks 25... a more easily gripped surface.” col. 3, ll. 45-51. At the meantime, Zadro discloses flexible arm 33 is a spirally formed steel tube in which adjacent spiral convolutions are flexible jointed, but frictionally engaged with one another to maintain an adjusted flexure of the arm. Zadro Paragraph 32, ll. 3-5. The flexible arm of Hung et al. requires using a plurality of disks to maintain the structure integrity of the arm. Even if it is possible to replace the flexible arm of Zadro with the one used in Hung et al. as the Examiner suggests, it doesn’t teach or disclose one of important feature of the present invention, which is to build a flexible arm where the plastic tube is directly formed on the elongate body member by an injection mold process. Actually, none of Zadro, Hung, or the combination of them teaches or discloses elements , such as “the plastic tube is directly formed on the elongate body member by an injection mold process” and “the exterior covering member has a diameter gradually reduced from two ends to a center thereof” as cited in claim 1 of the present invention.

With respect to the rejection claims 4 under 35 U.S.C. §103(a) as being unpatentable over Zadro in view of Hung et al. and Eames, although claim 4 has been cancelled, nevertheless, its element has been merged into the amended claim 1. It is still necessary to address the Examiner’s rejection. Eames discloses a hose for use in vacuum, air, or other brakes for railroad in which hose is employed. Eames col.1, ll. 11-13. The hose is particularly used for vacuum brakes. The Eames’ hose belongs to and was designed to be used is in a different field from the present invention is. It will be unreasonable to use Eames as a prior art by a skilled person of the supporting device field.

Therefore, Applicant respectfully submits that the features of claims would not be obvious to one skilled in the art. The standard for obviousness is described in a recent case, In re Dance, 48 USPQ2d 1635 (CAFC 1998), as follows.

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To establish a *prima facie* case of obviousness based on a combination of the content of various references, there must be some teaching, suggestion or motivation in the prior art to make the specific combination that was made by the applicant. *In re Raynes*, 7 F.3d 1037, 1039, 28 USPQ2d 1630, 1631 (Fed. Cir. 1993); *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). Obviousness can not be established by hindsight combination to produce the claimed invention. *In re Gorman*, 933 F.2d 982, 986, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991). As discussed in *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir. 1985), it is the prior art itself, and not the applicant's achievement, that must establish the obviousness of the combination. In re Dance, 48 USPQ2d 1635, 1637 (CAFC 1998).

(Emphasis added)

Therefore, Applicant respectfully disagrees with the Examiner's rejections. If the Examiner believes that a further telephonic interview will facilitate allowance of the claims, he is respectfully requested to contact the undersigned at (610) 446-5886. For the reasons stated above, Applicants respectfully assert that the pending claims are in condition for allowance. Reconsideration and allowance of the pending claims are respectfully requested.

Respectfully submitted,

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